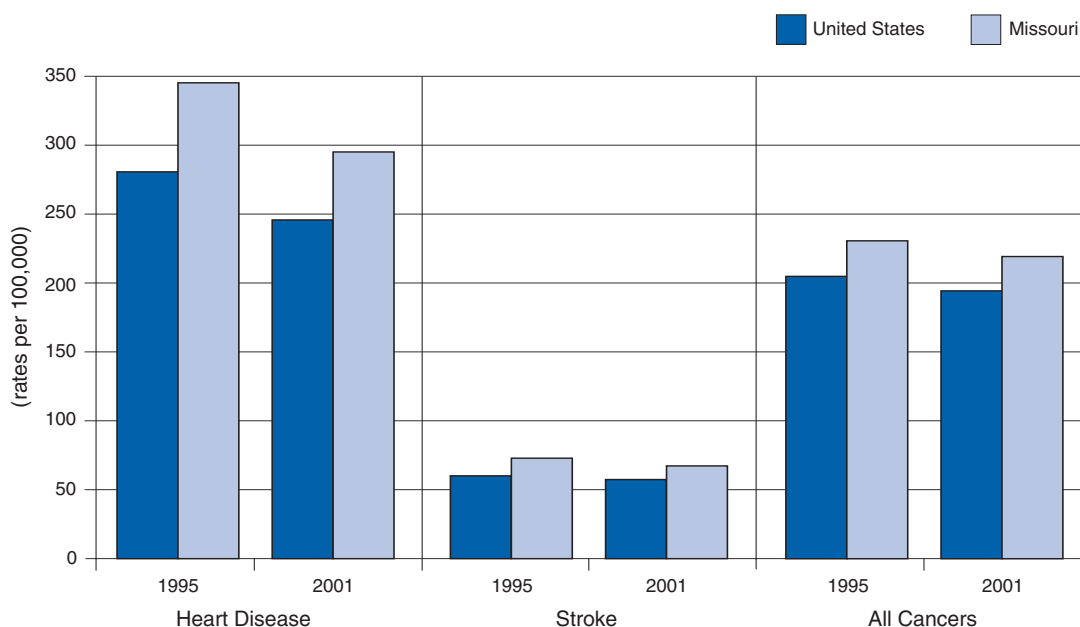


Chronic Diseases: The Leading Causes of Death

The Leading Causes of Death

United States and Missouri, 1995 and 2001



Source: National Center for Health Statistics, 2003

The Burden of Chronic Disease

Chronic diseases—such as heart disease, stroke, cancer, and diabetes—are among the most prevalent, costly, and preventable of all health problems. Seven of every ten Americans who die each year, or more than 1.7 million people, die of a chronic disease.

Reducing the Burden of Chronic Disease

Chronic diseases are not prevented by vaccines, nor do they just disappear. To a large degree, the major chronic disease killers are an extension of what people do, or not do, as they go about the business of daily living. Health-damaging behaviors—in particular, tobacco use, lack of physical activity, and poor nutrition—are major contributors to heart disease and cancer, our nation's leading killers. However, tests are currently available that can detect breast cancer, colon cancer, heart disease, and other chronic diseases early, when they can be most effectively treated.

The Leading Causes of Death and Their Risk Factors

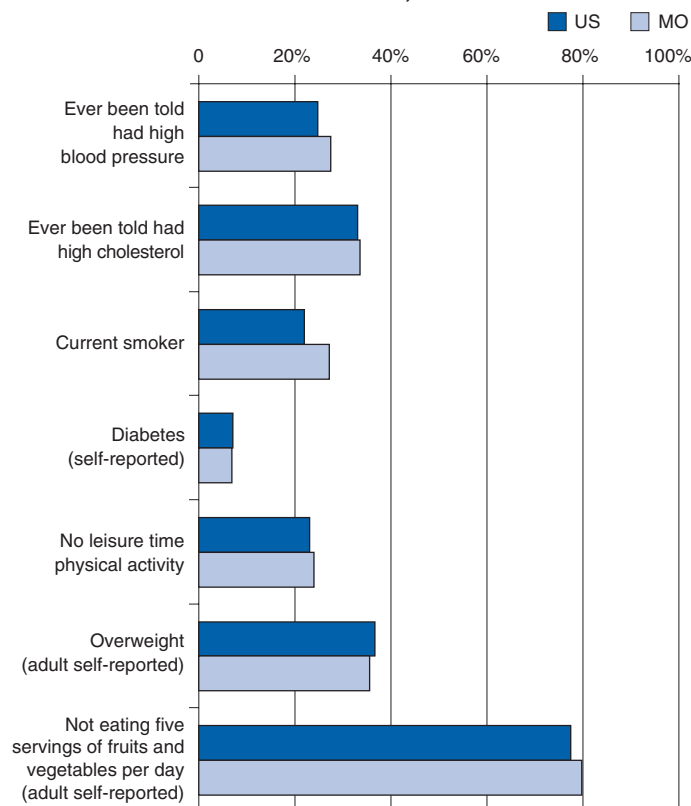
Heart Disease and Stroke

Heart disease and stroke are the first and third leading causes of death for both men and women in the United States. Heart disease is the leading cause of death in Missouri, accounting for 16,633 deaths or approximately 30% of the state's deaths in 2001 (the most recent year for which data are available). Stroke is the third leading cause of death, accounting for 3,796 deaths or approximately 7% of the state's deaths in 2001.

Prevention Opportunities

Two major independent risk factors for heart disease and stroke are high blood pressure and high blood cholesterol. Other important risk factors include diabetes, tobacco use, physical inactivity, poor nutrition, and being overweight or obese. A key strategy for addressing these risk factors is to educate the public and health care practitioners about the importance of prevention. All people should also partner with their health care providers to have their risk factor status assessed, monitored, and managed in accordance with national guidelines. People should also be educated about the signs and symptoms of heart attack and stroke and the importance of calling 911 quickly. Forty-seven percent of heart attack victims and about the same percentage of stroke victims die before emergency medical personnel arrive.

Risk Factors for Heart Disease and Stroke, 2003



Source: BRFSS, 2004

Cancer

Cancer is the second leading cause of death and is responsible for one of every four deaths in the United States. In 2004, over 560,000 Americans—or more than 1,500 people a day—will die of cancer. Of these annual cancer deaths, 12,480 are expected in Missouri. About 1.4 million new cases of cancer will be diagnosed nationally in 2004 alone. This figure includes 30,290 new cases that are likely to be diagnosed in Missouri.

Estimated Cancer Deaths, 2004

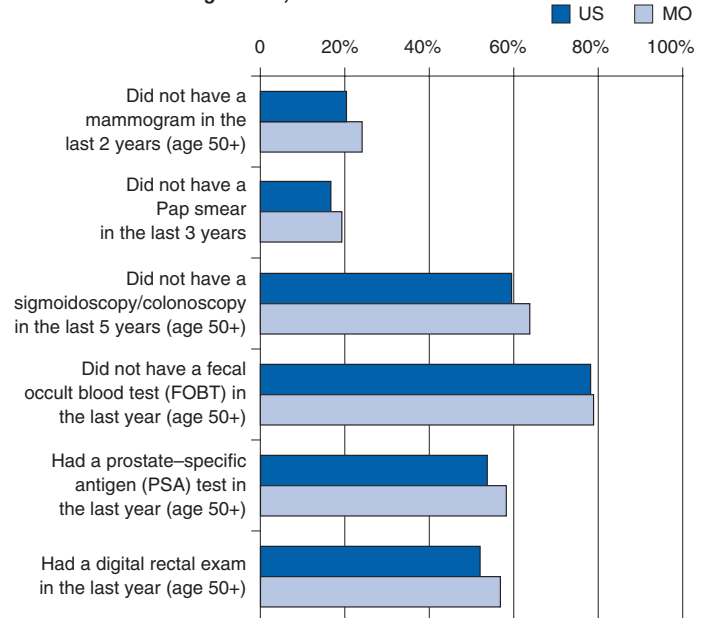
Cause of death	US	MO
All Cancers	563,700	12,480
Breast (female)	40,110	870
Colorectal	56,730	1,250
Lung and Bronchus	160,440	3,780
Prostate	29,900	450

Source: American Cancer Society, 2004

Prevention Opportunities

The number of new cancer cases can be reduced and many cancer deaths can be prevented. Adopting healthier lifestyles—for example, avoiding tobacco use, increasing physical activity, achieving a healthy weight, improving nutrition, and avoiding sun overexposure—can significantly reduce a person's risk for cancer. Making cancer screening, information, and referral services available and accessible is essential for reducing the high rates of cancer and cancer deaths. Screening tests for breast, cervical, and colorectal cancers reduce the number of deaths by detecting them early.

Preventive Screening Trends, 2002



Source: BRFSS, 2003

Missouri's Chronic Disease Program Accomplishments

Examples of Missouri's Prevention Successes

- Statistically significant decreases in cancer deaths among men across all races, with the greatest decreases occurring among African American men (433.6 per 100,000 in 1990 versus 371.5 per 100,000 in 2000).
- A 14.8% decrease in the number of women older than age 50 who reported not having had a mammogram in the last 2 years (from 38.9% in 1992 to 24.1% in 2002).
- Lower prevalence rates than the corresponding national rates for self-reported overweight (35.6% in Missouri versus 36.7% nationally).

CDC's Chronic Disease Prevention and Health Promotion Programs

In collaboration with public and private health organizations, CDC has established a national framework to help states obtain the information, resources, surveillance data, and funding needed to implement effective chronic disease prevention programs and ensure that all Americans have access to quality health care. CDC funding and support enable state health departments to respond efficiently to changing health priorities and effectively use limited resources to meet a wide range of health needs among specific populations. The table below is a breakdown of the CDC's funding awards to Missouri in the areas of cancer, heart disease, stroke, and related risk factors.

CDC Cancer, Heart Disease, Stroke, and Related Risk Factor Funding for Missouri, FY 2003

SURVEILLANCE	
Behavioral Risk Factor Surveillance System (BRFSS) <i>Missouri BRFSS</i>	\$213,352
National Program of Cancer Registries <i>Missouri Cancer Registry</i>	\$1,287,204
CHRONIC DISEASE PREVENTION AND CONTROL	
Cardiovascular Health Program <i>Work Site Inventory Program</i> <i>Community Policy and Environmental Change Program</i> <i>Hearts N' Parks</i>	\$1,250,001
Diabetes Control Program <i>Missouri DPCP Diabetes Workgroup</i> <i>Missouri DPCP Task Force</i> <i>Missouri DPCP Advisory Committee</i>	\$450,000
National Breast and Cervical Cancer Early Detection Program <i>Missouri Department of Health and Senior Services</i>	\$3,089,531
National Comprehensive Cancer Control Program <i>Bureau of Cancer Control</i>	\$134,605
WISEWOMAN <i>New Leaf...Choices for Healthy Living</i> <i>Show Me Healthy Women</i>	\$239,788
MODIFYING RISK FACTORS	
National Tobacco Prevention and Control Program <i>Missouri Tobacco Prevention and Control Program</i>	\$1,207,523
State Nutrition and Physical Activity/Obesity Prevention Program <i>Move For Your Youth</i> <i>PACE Training</i> <i>SHAPE UP Missouri/Walk Across Missouri</i>	\$441,035
Racial and Ethnic Approaches to Community Health (REACH 2010) <i>Missouri Coalition for Primary Care</i>	\$891,641
Total	\$9,204,680

The shaded area(s) represents program areas that are not currently funded. The above figures may contain funds that have been carried over from a previous fiscal year.

Additional Funding

CDC's National Center for Chronic Disease Prevention and Health Promotion funds additional programs in Missouri that fall into other health areas. A listing of these programs can be found at <http://www.cdc.gov/nccdphp/states/index.htm>.

Opportunities for Success

Chronic Disease Highlight: Cardiovascular Disease

Cardiovascular disease (CVD) is the leading cause of death in Missouri among all racial and ethnic groups and for both men and women. CDC mortality data indicate that in 2001, Missouri had the 12th highest heart disease death rate in the nation and the 18th highest stroke death rate. In addition to the cost in lives, the Missouri Department of Health reports that CVD also costs more than \$1 billion in hospitalizations per year.

The largely preventable nature of this disease makes the deaths associated with CVD even more tragic. Behavioral modifications, such as participating in physical activity, practicing good nutritional habits, quitting smoking, and maintaining a healthy weight substantially reduce one's risk of suffering from CVD. Behavioral Risk Factor Surveillance System data from 2003 indicate that in Missouri, only 20.2% of adults consumed 5 or more servings of fruits and vegetables per day and 54.9% did not meet the recommended guidelines for moderate physical activity. Almost 60% of Missouri adults were overweight (35.6%) or obese (23.6%), and more than a quarter of adults in the state were smokers (27.2%). More than 33.0% of adults in Missouri reported that they been told that they have high blood cholesterol, and 27.5% reported having been told that they have high blood pressure.

Despite remarkable declines in Missouri's overall CVD mortality rates since 1950, certain segments of the population have not benefited equally. Of particular concern are African Americans who experience considerably higher rates of heart disease and stroke than whites. According to CDC's Cardiovascular Health Program data, from 1996 to 2000, the heart disease death rate for African Americans in Missouri (745 per 100,000) was higher than the heart disease death rate for whites (585 per 100,000). In addition, the stroke death rate for African Americans (156 per 100,000) was also higher than the corresponding rate for whites (124 per 100,000).

To address the problem of CVD in Missouri, the state implemented the Mississippi Cardiovascular Health Program, which has received funding from the CDC since 1998. The program works to develop and coordinate partnerships, develop an inventory of policy and environmental strategies, provide training and technical assistance to local communities, develop population-based strategies, and develop culturally competent strategies for priority populations.

Text adapted from *The Missouri Cardiovascular Health State Plan 2000-2010*.

Disparities in Health

Heart disease is the leading cause of death among women in the United States. According to CDC's Cardiovascular Health (CVH) data, Missouri's overall cardiovascular disease death rate is declining. However, for women in Missouri aged 35 and older, the heart disease death rate increased—from 430 per 100,000 between 1991 and 1995 to 488 per 100,000 between 1996 and 2000). This increase particularly affected African American women (whose rates rose from 585 per 100,000 to 641 per 100,000 during the same periods) and Hispanic women, (whose rates rose from 248 per 100,000 to 328 per 100,000).

According to 2003 data from CDC's Behavioral Risk Factor Surveillance System, in Missouri, 74.4% of women consume less than 5 servings of fruits and vegetables per day. Additionally, 55.9% of women in Missouri report not engaging in moderate physical activity, while 81.7% report not engaging in vigorous physical activity. More than 23% of Missouri's women are smokers, and 28% have high blood pressure. According to the Missouri Department of Health and Senior Services' Office of Women's Health, in 2002, more than half of the state's nonwhite women (55%) were overweight and slightly more than one third (38%) of white women were overweight.

Other Disparities

- **Colorectal Cancer:** In Missouri in 2000, African American women had higher colorectal cancer death rates (23.1%) than white women (17.8%).
- **Cervical Cancer:** In 2002, African American women were more likely to report having had a Pap smear in the last 3 years than white women (92.2% compared with 80.1%), however, between 1997 and 2001, African American women in Missouri had a higher cervical cancer death rate than white women (6.3 per 100,000 compared with 2.4 per 100,000).
- **Mammography Screening:** In 2002, Missouri had a higher prevalence rate than the corresponding national rate for women over the age of 50 who reported not having had a mammogram in the last 2 years (24.1% in Missouri versus 20.4% nationally). However, for the same year, the prevalence rate for African American women over the age of 50 who reported not having had a mammogram in the last 2 years was lower than the corresponding national rate for African American women (14.8% in Missouri versus 18.2% nationally).

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